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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,283	12/16/2003	William H. Retsch JR.	1902A1	6569

7590 03/08/2005

PPG INDUSTRIES, INC.  
Intellectual Property Department  
One PPG Place  
Pittsburgh, PA 15272

EXAMINER
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WOODWARD, ANA LUCRECIA

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/737,283

Applicant(s)

RETSCH, WILLIAM

Examiner

Ana L. Woodward

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on May 14, 2004
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 2, 3, 6, 7, 10, 16-25, 27-30, 33, 34, 37, 43-58 and 60 is/are withdrawn from consideration.
- 5) ☐ Claim(s)        is/are allowed.
- 6) ☒ Claim(s) 1, 4, 8, 9, 11-15, 26, 31, 35, 36, 38-42 and 59 is/are rejected.
- 7) ☒ Claim(s) 5, 32 is/are objected to.
- 8) ☒ Claim(s) 1-60 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on        is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No.       .
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/14/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15, 26-42 and 59 drawn to reaction product of highly branched polymer and lactone, classified in class 525, subclass various.
  - II. Claims 16-25, 46-55 and 60 drawn to reaction product of highly branched polymer and lactam, classified in class 525, subclass various.
  - III. Claims 43-45 and 56-58, drawn to blend of the reaction product of invention I and a film-forming resin, classified in class 525, subclass various.

2. The inventions are distinct, each from the other because:

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a molding or coating composition without the presence of an additional resin which would react in-situ to produce a mutually exclusive species product and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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3. Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different effects in light of the different reactants used.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

5. Claims 1-60 are generic to a plurality of disclosed patentably distinct species comprising the various materials embraced by the highly branched polymer. The election of an ultimate species of highly branched polymer is requested. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. During a telephone conversation with Ms. Diane R. Meyers on February 15, 2005 a provisional election was made with traverse to prosecute the invention of invention I comprising the highly branched polymer derived from the monomers per claim 4, i.e., a polyurethane species, claims 1, 4, 5, 8, 9, 11-15, 26, 31, 32, 35, 36, 38-42 and 59. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2, 3, 6, 7, 10, 16-25, 27-30,

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33, 34, 37, 43-58 and 60 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

***Claim Rejections - 35 USC § 112***

8. Claims 1, 4, 8, 9, 11-15, 26, 31, 35, 36, 38-42 and 59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1 and 26, the term “polyfunctional monomer” is indefinite as to scope and meaning. It is unclear as to whether said language is referring to a monomer having more than one type of functional group or to a monomer having plural functional groups of the same type.

***Allowable Subject Matter***

9. Claims 5 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. 6,534,600 discloses hyperbranched polymers derived from monomers A and B but provides no teaching or incentive to further react these polymers with a lactone. U.S. 5,788,989 discloses dendrimers with terminal functional groups that can be reacted with reactants. Lactones are listed as one of many suitable reactants. There is no teaching or incentive to use dendrimers derived from the reaction of two monomers.

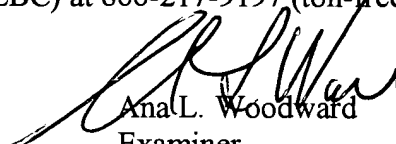
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***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ana L. Woodward  
Examiner  
Art Unit 1711

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